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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/460,361	12/13/1999	AKIRA UTSUMI		2392

7590

03/01/2002

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EXAMINER

PRATT, CHRISTOPHER C

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 03/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Mail

MF=4

**Office Action Summary**

Application N .

09/460,361

Applicant(s)

AKIRA UTSUMI

Examiner

Christopher C. Pratt

Art Unit

1771

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 September 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Specification***

1. The specification is objected to because the pages are not numbered.  
Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

2. Claims 1-18 are objected to because of the following informalities: Please change the phrase "fabrics-laminate" to fabric laminate. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because of the phrase beginning "an average of a ...." What is the intended meaning of the phrase? Is applicant attempting to add a third layer to the composite and calling it a "merely-entangled nonwoven fabric" or is applicant attempting to define the tensile strength of the "entanglement-based" layer? For the purposes of examination the phrase will be treated as an attempt to define the tensile strength of the "entanglement-based" layer.

Claim 5 is indefinite because it appears to refer to the "rigid layer" by two different names. Is this the case, or is applicant attempting to refer to two different layers?

Similarly claim 6 appears to refer to the same layer by two different names. Please amend these claims to eliminate the confusion.

Claim 7 is indefinite because it contains the phrase "profile fibers." This term is not defined in the specification. Is applicant referring to conjugate fibers?

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemoto et al (6102465) in view of Nagata et al (6312542).

Nemoto is concerned with the creation of an internal trim panel used as the carpet layer of an automobile comprising two nonwoven layers (12 and 13 of fig. 1). Nemoto teaches said nonwoven layers to be composed solely of polyester fibers comprising thermally fused fibers (col. 4, lines 25-45). Nemoto teaches that nonwoven layers having different densities absorb different frequencies of sound (example 1). Nemoto also teaches that it is known to laminate low density layers to high density layers in automotive carpeting (col. 1, lines 31-34). Nemoto, however only refers to surface densities.

Nagata is concerned with the creation of nonwoven laminates having sound dampening properties useful in automobiles. Nagata teaches applicant's claimed density ranges (abstract). It would have been obvious to a person having ordinary skill in the art to form layers "12" and "13" within the density ranges instantly claimed. The skilled artisan would have been motivated to utilize said density ranges by the desire to allow layer "5" of Nemoto to absorb multiple sound frequencies.

Neither Nemoto nor Nagata seem to teach tensile strength. If applicant's claimed tensile strength is not inherent in the webs of Nemoto and Nagata it would have been obvious to a person having ordinary skill in the art to form said webs having applicant's claimed tensile strength. The tensile strength of a web is primarily governed by the amount of interfiber bonding. Therefore, the skilled artisan could optimize tensile strength through routine experimentation. Such a modification would have been motivated by the desire to increase the strength and longevity of the webs.

Nemoto appears to be silent with respect to thickness of the layers. Nagata, however, teaches a thickness within applicant's claimed range (example 1). It would have been obvious to a person having ordinary skill in the art to vary the thickness of the laminate. Such a modification would have been motivated by the desire to optimize the sound absorption properties and render the laminate suitable to fit in a variety of different locations.

Nemoto teaches a surface layer (5a of figure 1).

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**Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Orimo et al (5817408) discloses elements of applicant's invention.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Pratt whose telephone number is 703-305-6559. The examiner can normally be reached on Monday - Friday from 7 am to 4 pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Christopher C. Pratt  
February 12, 2002



TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700